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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,374	03/15/2001	Walter Winkler	1020843-991180	8757

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EXAMINER

FOX, CHARLES A

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 02/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/810,374	WINKLER, WALTER
Examiner	Art Unit
Charles A. Fox	3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-11, 13 and 17-21 is/are rejected.

7) Claim(s) 12 and 14-16 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 15 March 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . 6) Other: _____

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 03-17-2000. It is noted, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b).

Claim Objections

AN Claims 12 and ~~14~~ 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regards to claim 19 while a "standing seat" is mentioned in the specification it is not defined, therefore it is not definite as to what constitutes a standing seat. In regards to claim 21 a "light barrier" also is not defined in the specification, and the examiner is not sure how a light barrier facilitates communication.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,6,10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Munten. In regards to claim 1 Allen (US 4,439,102) teaches an apparatus for picking articles situated on pallets in a retrieval rack, comprising:

a vehicle capable of traveling along the picking front of a pallet rack;
a first lifting device (10) with a height adjustable picker carrier;
a second lifting device (18) with a height adjustable pallet carrier;
wherein the pallet and picker carriers can be positioned relative to a respective retrieval position in the pallet rack.

Allen does not teach the pallet and picker lifting devices to be independent of each other. Munten (4,395,189) teaches a lifting device (1) with two independently operated masts. It would have been obvious to one of ordinary skill in the art, at the time of invention to use two independent masts as taught by Munten on the device taught by Allen in order to allow the operator greater freedom in the relative positions of the picker and pallet carriers, as well as allowing the picker to stay at ground level if not needed at the level of the pallet carrier, therein saving energy and time during the operation of the apparatus.

In regards to claim 2 and 4 Allen further teaches that the two lifting devices (10)(18) are on opposite ends of the vehicle.

Regarding claim 3 Allen also teaches that each lifting device (10) and (18) has vertical rails (M)(40) respectively, along which the carriers are vertically displaceable.

In regards to claim 6 Allen further teaches that the picker carrying device (10) has a circumferential crash guard for the picker.

In regards to claims 10 and 11 Allen also teaches a load receiving means (F) for supporting a load receiving pallet at a right angle to the travel direction of the vehicle.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Munten as applied to claim 1 above, and further in view of Burt. Allen in view of Munten teach the limitations of claim 1 as above, they do not teach the vehicle as being track mounted. Burt (US 4,252,497) teaches an article handling system (200) with a transport vehicle that is mounted on rails (203). It would have been obvious to one of ordinary skill in the art, at the time of invention that the device taught by Allen in view of Munten could be mounted on rails as taught by Burt in order to maintain proper placement of the vehicle in relation to the picker racks, thereby reducing the chance of the vehicle becoming accidentally engaged with the racks.

Claims 7,13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Munten as applied to claim 1 above, and further in view of Singer et al. Regarding claims 7 and 13 Allen in view of Munten teach the limitations of claim 1 as above, they do not teach computer control of the picking operation. Singer et al. (US 5,953,234) teach a storage facility (3) with a semi automated inventory control and picking system (101) where the inventory is stored and retrieved by stacker retriever machines. See column 9 lines 31-38. Singer et al. also teach a order picking screen on

a terminal that displays the picking positions for a product. It would have been obvious to one of ordinary skill in the art, at the time of invention that the control and feedback system taught by Singer et al. could have been added to the apparatus taught by Allen in view of Munten in order to allow a picking lift to move to the proper location without operator input, allowing for flexible use of the storage space by allowing any available space to store any type of product, with a computer keeping track of locations of the various products.

Regarding claim 17 Allen further teaches that the height of the picking and pallet lifts are manually adjustable in relationship to a rack and each other.

Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Munten as applied to claim 1 above, and further in view of Dammeyer et al. Allen in view of Munten teach the limitations of claim 1 as above, they do not teach a dead man's switch or a standing seat. Dammeyer et al. (US 5,044,472) teaches an order picking apparatus with a standing seat (32) and a dead man's switch. See column 3 lines 19-26. It would have been obvious to one of ordinary skill in the art, at the time of invention to add the seat and dead man's switch as taught by Dammeyer et al. to the device taught by Allen in view of Munten as they are well known safety features on many types of apparatus, and would decrease the likelihood of the apparatus moving without a clear and present signal that the operator is in a safe position for movement of the vehicle.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Munten and further in view of Dammeyer et al. as applied to claim 8 above, and

further in view of Singer et al. Allen in view of Munten and further in view of Dammeyer et al. teach the limitations of claim 8 as above, they do not teach that the system is designed to acknowledge when a pick is finished. Singer et al. teach an input being used to inform a controller that a pick is finished, allowing the picker to be instructed where to report for the next pick. It would have been obvious to one of ordinary skill in the art, at the time of invention that a control system as taught by Singer et al. could be added to the apparatus taught by Allen in view of Munten and further in view of Dammeyer et al. in order to route pickers to the closest next pick, thereby saving travel distance and time for the picker.

Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Munten as applied to claim 1 above, and further in view of Benjamin. Allen in view of Munten teach the limitations of claim 1 as above, they do not teach the apparatus as moving in the horizontal and vertical direction at the same time, or an outside power source for the vehicle. Benjamin (US 4,252,217) teaches using an overhead power line (56) to power a picking device (10). Benjamin further teaches that the picker device (10) can have compound travel when moving from one location to another. It would have been obvious to one of ordinary skill in the art, at the time of invention to add the capabilities taught by Benjamin to the device taught by Allen in view of Munten in order to improve the efficiency of the device and to eliminate the need to rely on battery power to drive the device, therein increasing the productivity of the device.

Claim 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Munten as applied to claim 1 above, and further in view of Kita et al. Allen in view of Munten teach the limitations of claim 1 as above, they do not teach the communication system as being effected via light. Kita et al. (US 5,002,449) teach a storage and retrieving system with automatic shuttles that are controlled via optical communication units(9). It would have been obvious to one of ordinary skill in the art, at the time of invention that optical communication as taught by Kita et al. could have been used with the apparatus taught by Allen in view of Munten in order to automate the system in a reliable manner that is not susceptible to electrical interference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-4:30 Monday-Thursday and on alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

CAF
2/7/02